

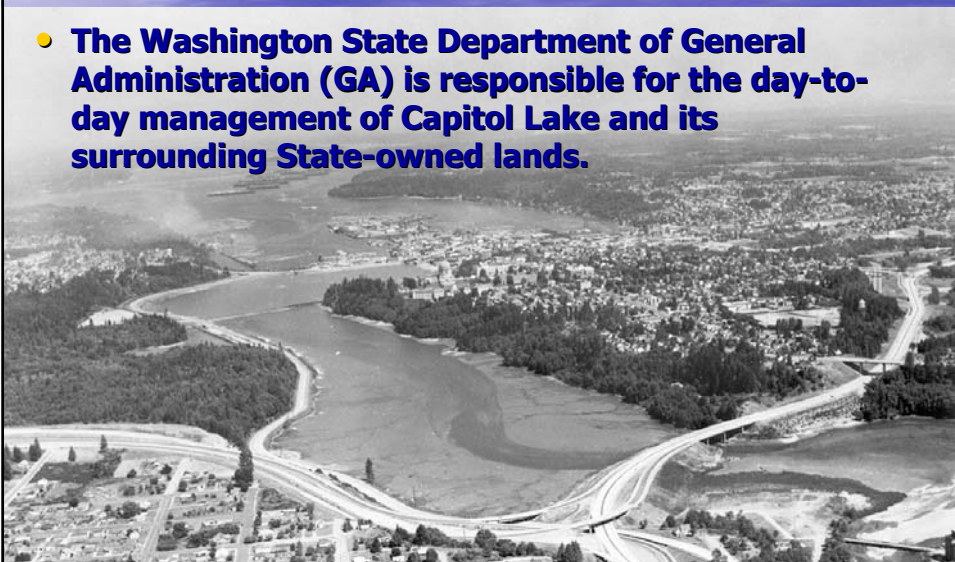
Deschutes Estuary Restoration Feasibility Study

November 17, 2003

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Challenge for the State ...

- **The Washington State Department of General Administration (GA) is responsible for the day-to-day management of Capitol Lake and its surrounding State-owned lands.**



General Administration Manages ...

- Capitol Lake dam
- About 40 acres of parks on the lake (*Heritage, Marathon, & Interpretative Site*)
- About 1.6 miles of roadway (*Deschutes Parkway*)
- About 260 acres of Capitol Lake



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Fisheries Responsibilities

- The Washington State Department of Fish and Wildlife and the Squaxin Island Tribe



... are co-managers of the Deschutes River fisheries resources.

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Other Governmental Responsibilities

- The lake is located within the cities of Olympia and Tumwater.
- The Deschutes River watershed lies within Thurston County.
- Dept. of Natural Resources owns the bed of the lake.
- Dept. of Ecology administers the Shoreline Management Act and wetland mitigation.
- The Port of Olympia is affected by the sediments from Capitol Lake.

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Collaborative Management

- In 1997, GA invited these state agencies, the Tribe, and these local governments to assist in making management decisions which affect the lake.
- This management advisory group is called the "Capitol Lake Adaptive Management Plan (CLAMP) - Steering Committee".

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CLAMP - Steering Committee

- General Administration,
- Ecology,
- Fish & Wildlife,
- Natural Resources,
- Squaxin Island Tribe,
- Tumwater,
- Olympia,
- Thurston County, and
- Port of Olympia.



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"A Vision for the Next Ten Years 2003-2013"

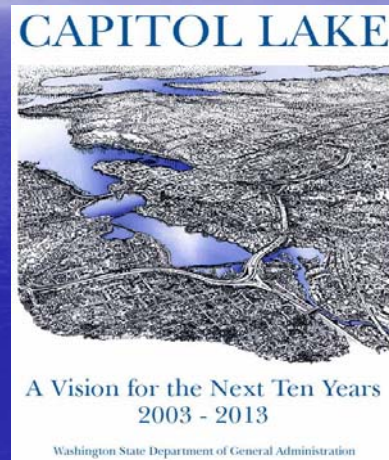
- Overall Goal is to adaptively manage the Capitol Lake basin.
- **Avoid making decisions that would preempt the selection of a long-term Aquatic Environment.** (*e.g. freshwater or saltwater*)
- Provide "Management Objectives" to deal with a wide variety of the day-to-day management activities.

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CLAMP Plan Review & Adoption

1. **CLAMP - Steering Committee**
 - Nine Members
2. **Director of General Administration**
 - Robert Fukai
3. **State Capitol Committee**
 - Governor
 - Lt. Governor
 - Sec. of State
 - Lands Commissioner



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State Capitol Committee

- On November 6, 2003 the State Capitol Committee (SCC) adopted **Management Objective #2** as part of the CLAMP 10 Year Plan.
 - ***"Complete an estuary feasibility study to determine a long-range management decision."***
- SCC motion also included securing full funding of the estuary feasibility study by June 30, 2005.

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Deschutes Estuary - Issues

- Fish and Wildlife Habitat
- Sedimentation
- Flooding
- Aquatic Weeds
- Water Quality
- Reflecting Pool - Civic Image
- Odor

Survey Map
c. 1854

DRAFT - Scope of Work for the Estuary Feasibility Study

- There are many unknowns associated with estuary restoration.
- The intent of this feasibility study is to investigate these uncertainties and then identify the costs and benefits of such a restoration.

Important Areas of Investigation

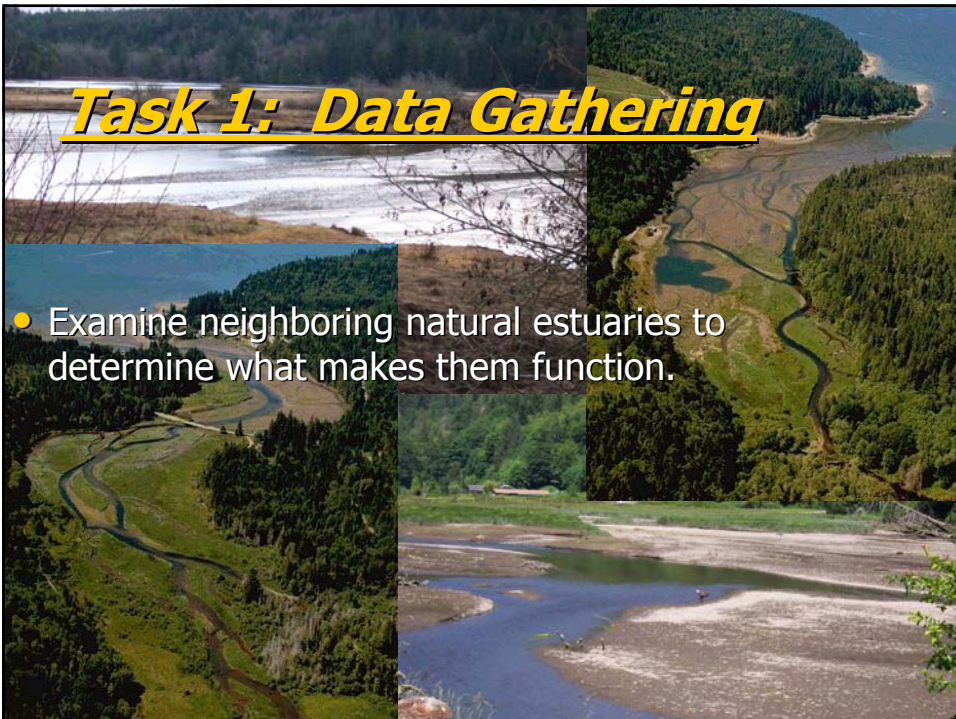
- *Task 1: Data Gathering*
- *Task 2: Hydraulic and Sediment Transport Analysis*
- *Task 3: Biological Considerations*
- *Task 4: Design Alternatives*
- *Task 5: Net Benefit Analysis*

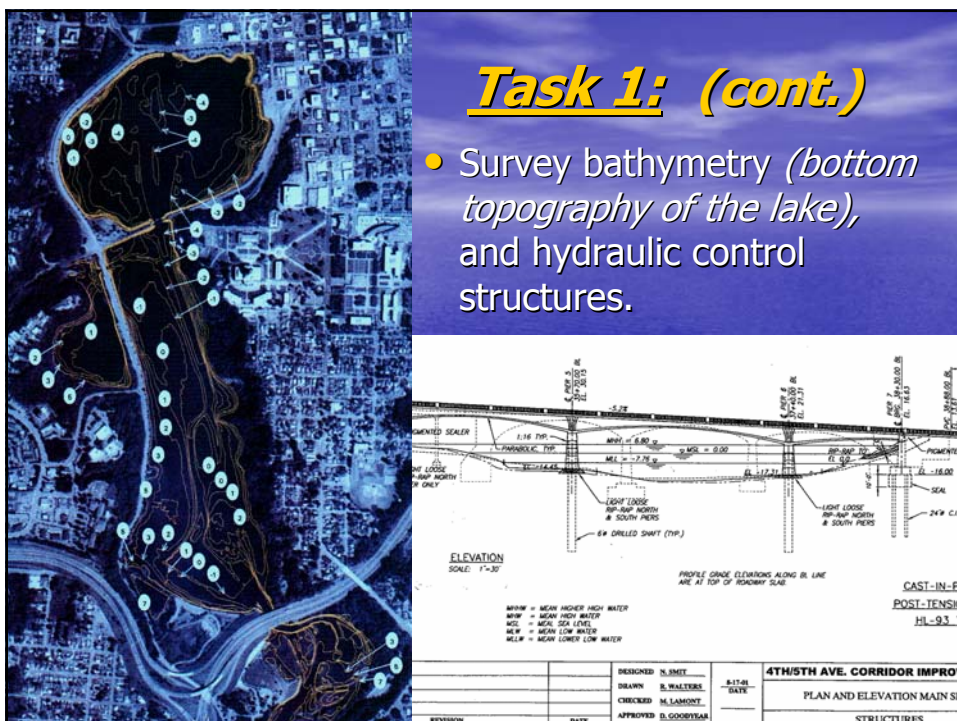
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Task 1: Data Gathering

- Examine neighboring natural estuaries to determine what makes them function.

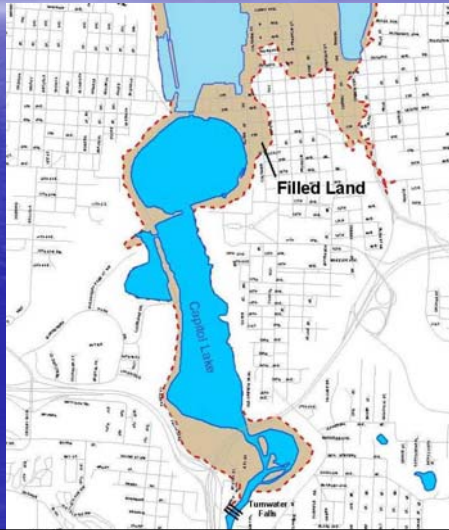




Task 2: Hydraulic and Sediment Transport Analysis

Can a properly functioning estuary be restored in the lower Deschutes?

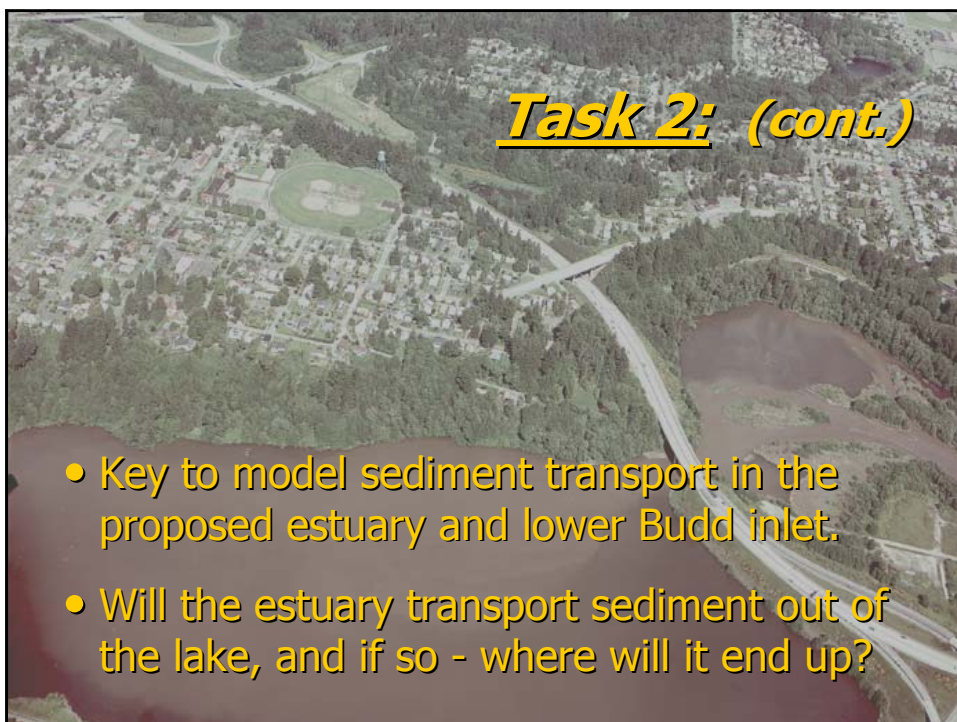
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Task 2: (cont.)

- Determine the effects of constrictions and other shoreline modifications on circulation patterns.





Task 2: (cont.)

- Determine effects of high tides and Deschutes River flooding on infrastructure.



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Task 3: Biological Considerations

With the findings of the **Hydraulics and Sediment Transport study**, determine the biological responses.

- What type of estuary will form?
- Will it be self-sustaining and productive?
- How will variations in elevation or circulation pattern affect plant and animal communities?
- What will the estuary look like in the future?

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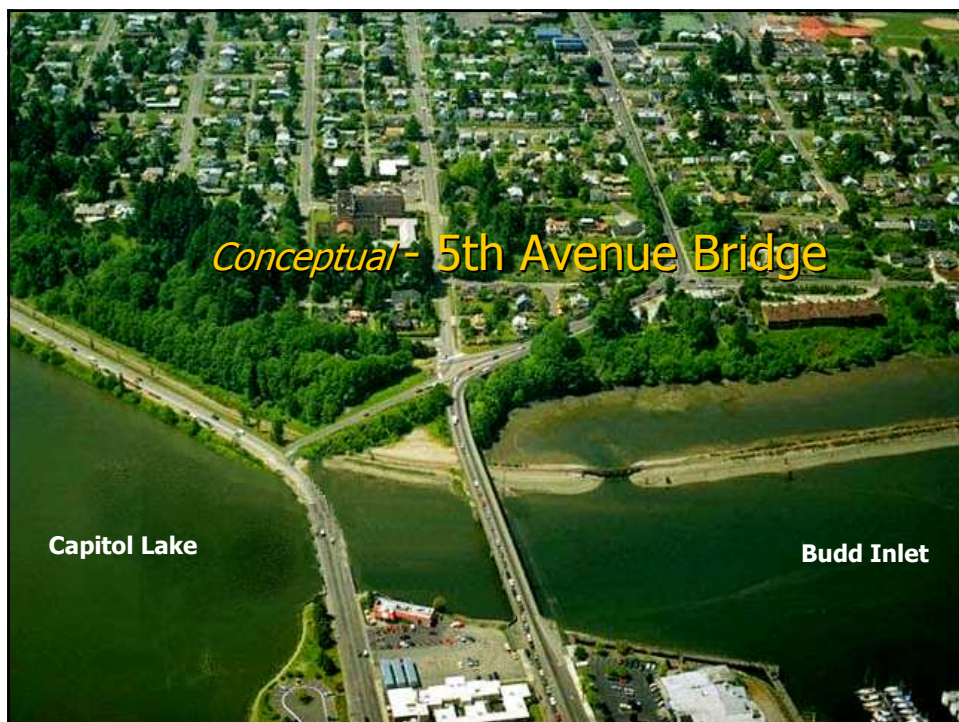
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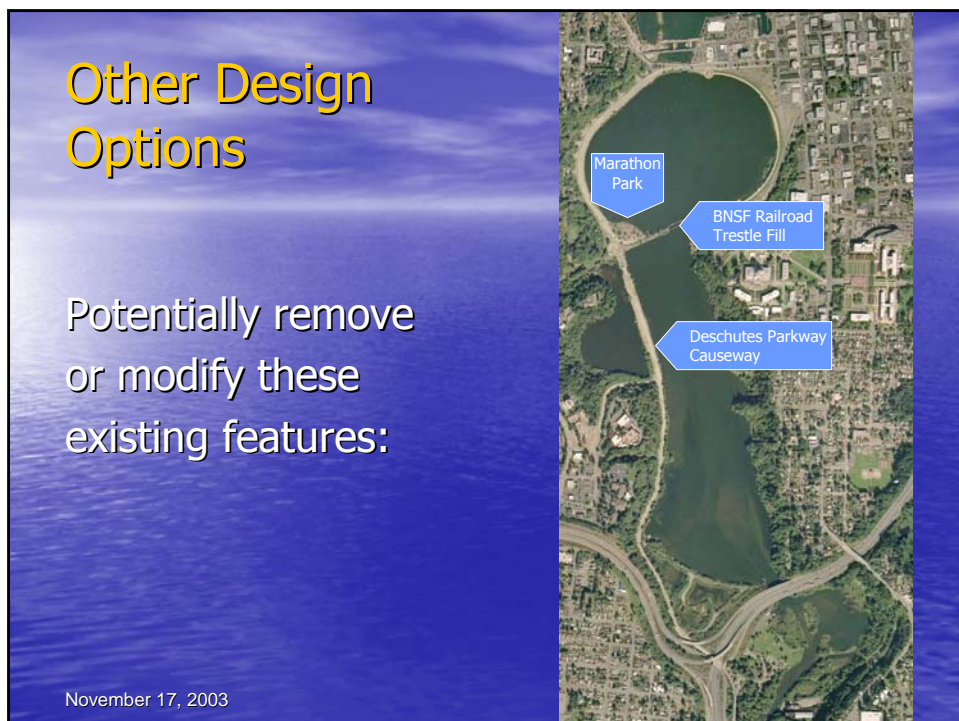
Initial Estuary Design

- Remove the Capitol Lake dam and construct a new bridge for Deschutes Parkway and 5th Avenue.
- Review modifications to:
 - *Deschutes Parkway,*
 - *Railroad Bridge/Marathon Park,*
 - *I-5 Bridge, and*
 - *Percival Cove.*
- Determine that natural processes are supported, and if any modifications are necessary.

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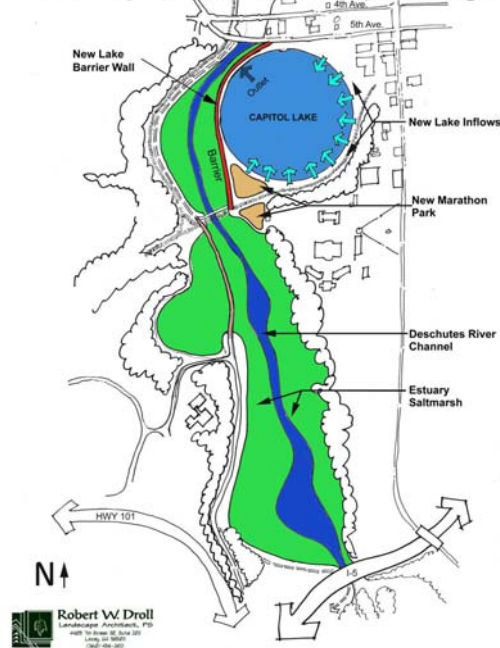




Or ... Create a Combination Lake - Estuary

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New Capitol Lake Concept Design



Task 5: Net Benefit Analysis

- The community, engineering, and biological costs and benefits will be examined.
- Alternatives will be examined on a short and long term basis.
- A common currency will be developed so that comparisons can be made across the full range of values and alternatives.
- An important consideration for selecting a preferred alternative will be that the community trusts that the benefit-cost analysis was fair and equitable.

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How much would the study cost?

- **Study Subtotal** \$760,000
- **Contingency** \$115,000 to \$190,000
- TOTAL** **\$875,000 to \$950,000**

– *Once initiated, the feasibility study should take about one to two years to complete.*

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CLAMP Entity Support

	Sponsor*	In-Kind	Seek Grants	Expert Staff
• General Administration	\$200,000	\$79,000	✓	✓
• Ecology	\$2,000	\$100,000		✓
• Fish & Wildlife	✓	\$22,000/yr		✓
• Natural Resources	✓		✓	
• Squaxin Island Tribe	✓	✓	✓	✓
• Tumwater	✓	✓		
• Olympia	\$20,000	\$30,000	✓	
• Thurston County		✓		
• Port of Olympia	\$10,000			

* = *Cash contributions based upon letters received to date.
Sponsors willing to participate with local staff in project.*

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Potential Grant Funding Sources

- **SALMON RECOVERY FUNDING BOARD (SRFB)** –
For the Estuary Feasibility Study, and Restoration Projects
- ✓ **PUGET SOUND ACTION TEAM - [Applied for \$45,000]**
Public Involvement and Education (PIE) Program
- ✓ **USFWS - [Applied for \$20,000]**
Watershed Restoration Program
- **NOAA/WDOE** –
Coastal Zone Management (CZM) Program
- **USEPA** –
Watershed Initiative Program

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Example of “**In-Kind**” support

- The State Department of Ecology will need a bathymetry survey and a 3-dimensional computer model of Capitol Lake for its Deschutes River-Budd Inlet TMDL Study.
- If they undertook the bathymetry survey (*est. \$30,000*) with their own resources, then this could be counted as an “**In-Kind**” contribution.
- In this example, Ecology would also be taking on one of the TASKS listed within the scope of work.

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NEXT STEPS ...

- Continue to discuss the *Estuary Feasibility Study* throughout the community.
- Refine the scope of work and budget, as needed.
- Seek funding opportunities to support the study.
- Provide timely updates to the ***State Capitol Committee***.

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QUESTIONS ?

Contact:

- **Department of General Administration – Division of Facilities Planning and Management**

1058 Capitol Way S
Olympia, WA 98504-1019
360-902-0944

- Check the website at:
www.ga.wa.gov/CLAMP/index.html

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Contact: *(cont.)*

- **Department of Fish and Wildlife – Habitat Program**

Natural Resource Building
1111 Washington St SE
Olympia, WA 98504
360-902-2611

- **Thurston Regional Planning Council**

2404 Heritage Court SW #B
Olympia, WA 98502-6031
360-786-5480

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